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MONTANA FOREST PRODUCTS BULLETIN

Department of State Lands, Division of Forestry
2705 Spurgin Road, Missoula, Montana 59801
Ph: (406) 542-4300

GARY G. BROWN, State Forester

PAUL MOORE, Editor

VOL. 15, NO.1 JANUARY--MARCH 1990

This bulletin is mailed quarterly to individuals engaged in the Forest Products Industry in Montana. In addition, it is mailed to county agents, lumber brokers, wholesalers, dealers of sawmill and logging equipment, educators, as well as the Departments of Forestry in many states.

The purpose of the newsletter is to communicate information regarding the properties and uses of wood products, promote efficiency in the utilization of wood from the stump to the end product, and to serve as an information source for members of the forest products industry.

All persons receiving this newsletter are asked to examine their mailing addresses and advise this office of any corrections needed for proper mailing.

BEST MANAGEMENT PRACTICES LAW, EFFECTIVE JANUARY 1, 1990

On January 1, 1990, a new forestry law went into effect to help protect the quality of Montana's water resources. HB678 advocates Best Management Practices (BMPs) for forestry operations and requires that industrial and non-industrial forest land owners or operators notify the Department of State Lands (DSL) before conducting any forest practice activities on private lands. These activities include harvesting trees, building or reconstructing roads, site preparation or managing logging slash.

After notifying DSL of your forest practice activities you will receive a receipt of notice that the forest practices may proceed or that an on-site visit is necessary; you will also be given information on Best Management Practices.

Owners who plan to harvest multiple sites can give DSL an operating plan for three, six or twelve months instead of separate notices for each operation.

If owners or operators change their plans, they need to let DSL know how their plans have changed. For more information, contact your local DSL office or call 542-4300.

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THINKING ABOUT COGENERATION?

By Jim Poxleitner

Are you thinking about installing a cogen plant on your mill site to solve your hog fuel problem, if only the local electrical utility would give you a rate that would make your proposed cogen facility economically viable? There seems to be a feeling by many that the utilities keep a buy-back electric rate low just to discourage non-utility facilities from being built. This may or may not be true; however, one must consider a few facts before deciding on a potentially good cogen project.

In 1978, the Public Utilities Regulatory Policy Act (PURPA) was instated for the purpose of requiring utilities to purchase the electric generation from qualifying cogen facilities at a rate that was determined to be the utilities-avoided cost. The avoided cost is nothing more than the cost to the utility for the next required unit of power that can be delayed by a qualifying facility.

For example, Montana Power Company's present avoided cost varies between 3.5 cents and 4.5 cents per Kwh; however, as future plans are developed for purchased power or new generation facilities, this rate will tend to move in an upward direction. Depending on your particular cogen facility, this rate may prove to be below the break-even point for a realization of a good return on your investment.

One should realize that a regulated utility is bound by regulations that are enforced by the Public Service Commission to protect the rate payer. Therefore, buy-back rates are not indicative of the utility's unwillingness to negotiate, but rather a utility's justified rate that is approved by the PSC.

It should be further noted that the cost of acquiring cogen power by a utility is passed on through the rates no differently than other purchased power expenses. Therefore, an analogy can be made that a cogen buy-back rate higher than other alternative sources of power would be essentially a rate payer subsidization to the cogen producer.

A potential cogen producer should analyze the economics very closely prior to investing into a capital-intensive generating facility. If your analysis produces a definite economic advantage, then a facility of that type should be pursued.

Jim Poxleitner is the Wood Products Account Executive for the Montana Power Company.

SOFTWOOD SAWMILL IMPROVEMENT PROGRAM MONTANA SELECTED STUDY RESULTS

In 1973 the Sawmill Improvement Program was developed by the U.S. Forest Service, Forest Products Laboratory in Madison, Wisconsin. "The idea to increase productivity by improving efficiency was born when there was a concern over a lumber shortage. The forest service was pressured to get more lumber on the market and to help stretch the nation's softwood timber supply."

Since the inception of the program, hundreds of studies have been conducted nationwide. These studies identified where improvements could be made in the milling process to increase lumber recovery and value.

Evidence from SIP studies indicates lumber recovery is on the rise, despite the fact that more mills today are sawing smaller logs. Today's successful sawmills understand the effect that sawing variation, planing allowance, product target size and kerf play on lumber recovery.

A collection of 13 Montana studmill studies conducted from 1984 through 1987, with the exception of one study from 1981 and 10 sawmill studies conducted from 1983 to 1987, are collectively shown in this report. These figures represent a combined annual State-wide lumber production of 785 MMBF. A national comparison of milling efficiency can be obtained in a technical report titled "Relative Softwood Conversion Efficiency by Region of the United States," Forest Products Journal, February, 1988; Vol. 38, No. 2. Because SIP studies are designed to analyze the efficiency of the processing equipment, only straight sound logs are used; therefore actual LRF may vary.

Lumber Recovery Factor (LRF) is the ratio of nominal board feet of lumber recovered per cubic foot of log input to a sawmill. For example--if 1,000 board feet of lumber (nominal measure) were recovered from 135 cubic feet of logs, the LRF would be 1,000 divided by 135 equaling 7.41.

	STUDMILLS			SAWMILLS		
	High	Avg.	Low	High	Avg.	Low
Current (LRF)	10.21	8.65	7.17	8.34	7.86	7.13
Potential (LRF)	11.00	10.18	9.53	10.24	9.58	8.62
Headsaw kerf						
(circular)	.340	.267	.189	.380	.340	.300
(band)	.155	.136	.120	.185	.161	.140
Resaw kerf						
(circular)	.167	.144	.123	.250	.153	.148
Target Size						
(4/4 Lumber)	1.06	1.01	.957	1.02	1.00	.959
(8/4 Lumber)	1.85	1.73	1.64	1.81	1.74	1.68
Planing Allowance						
(Bottom Head Only)	.078	.061	.042	.106	.066	.030
Within Board Variation						
(4/4)	.057	.051	.019	.106	.066	.023
(8/4)	.054	.037	.011	.054	.029	.010
Between Board Variation						
(4/4)	.031	.024	.013	.052	.023	.011
(8/4)	.060	.036	.014	.070	.040	.011
Average log Diameter		8.9			11.0	

Within board variation is an indicator of the performance of the saws; between board variation, the setworks, or the log or cant transport mechanism.

What effect does increasing LRF have on annual production in a mill? Assume a mill produces 20 million board feet of lumber per year and has an LRF of 6.50. If the mill were to increase its LRF to 7.20 by making improvements in the operation, it would realize an additional 300,000 board feet increase for each 0.01 improvement in LRF.

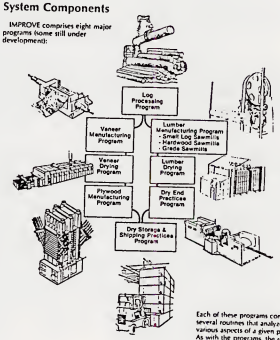
THE IMPROVE SYSTEM

Want more from your lumber, veneer, or plywood operation? The **Improve System** can help you achieve it. The "Integrated Mill Production and Recovery Options for Value and Efficiency" is a package of quick, easily understood and effective tools for measuring and improving the efficiency of sawmills, veneer mills and plywood plants. Under development by the USDA Forest Service, its data collection procedures and computer software combine several successful, existing, recovery improvement programs with the latest technology and research developments.

Improve consists of eight major programs, each capable of evaluating a specific process in the primary manufacturer of lumber, veneer, or plywood. It applies to both softwoods and hardwoods, with software adapted for each type's individual needs. For more information contact State and Private Forestry, USDA, Forest Service, Forest Products Laboratory, One Gifford Pinchot Drive, Madison, WI 53705-2398; Phone: (608) 264-5727 or the Marketing Bulletin Editor.

System Components

IMPROVE comprises eight major programs (some still under development):

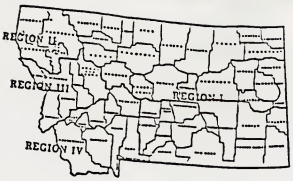


Each of these programs consists of several routines that analyze various aspects of a given process. As with the programs, the routines can be used independently or in series.

MONTANA LOG PRICE REPORT

The State-wide Log Price Report on the following page catalogs recently delivered average log prices to sawmills by species using three geographical areas within Montana. Prices are provided by approximately 35 sawmills operating within the State. The report is compiled through the University of Montana, Bureau of Business and Economic Research, in Missoula, Montana.

Market Trend Sawmills reported 5 to 10 percent increases for most species in the third quarter of 1989. This can be attributed to timber supply concerns and a steady market demand for wood products. Prices for delivered log at western Montana sawmills have increased 20 to 40 percent from October 1988 to October 1989.



MONTANA SAWLOG AND VENEER LOG PRICE REPORT

October 1989

The following information is a summary breakdown of recent past average prices reportedly paid by primary wood processors for logs of the various species listed. These prices are not necessarily a reflection of current market prices. Fair market prices may vary a great deal based on log size, length, quality, contract size and terms, and a number of other factors. All information reported is recent average price per thousand board feet (MBF), Scribner Decimal rule, delivered to the mill site, unless otherwise noted.

Prices provided for this report by individual firms are treated as confidential disclosure of the firm's operations. Any requests for mill-specific data which have been provided for the log report will be denied.

SAWLOGS Scribner Dec C MBF	REGION I	*	REGION II	*	REGION III	*
	Avg. Low High		Avg. Low High		Avg. Low High	
Ponderosa pine	$130/$120/$140	F			$155/$150/$165	F
(Yellow)			$330/$300/$350	G		
(Bull)			$193/$145/$250	G		
Lodgepole pine	$158/$140/$175	F	$195/$160/$230	G	$190/$165/$240	G
Douglas-fir	$162/$145/$175	G	$198/$160/$230	G	$188/$170/$225	G
Western larch			$201/$175/$230	G		
Englemann spruce	$158/$140/$175	F	$205/$170/$230	G	$204/$175/$240	G-F
Subalpine fir			$190/$160/$230	G	$200/$175/$225	G
Grand fir			$192/$160/$230	G		
Western red cedar			$238/$200/$275	F		
Hemlock			$196/$175/$220	G-F		
White pine			$332/$195/$400	G		
Cottonwood	$103/$ 80/$125	F			$103/$ 80/$125	P

VENEER LOGS Scribner Dec C MBF	STATEWIDE REPORT	
Species	Avg. Low High	Demand next 60 days*
Douglas-fir	$225/$210/$240	G
Ponderosa pine (bull)	$185/$185/$185	P
Western larch	$225/$210/$240	G
Engelmann spruce	$218/$195/$240	G
Other Species	$195/$195/$195	G-F

* Demand next 60 days
G = Good
F = Fair
P = Poor

MONTANA SPECIALTY PRODUCT

LOG PRICE REPORT

NOVEMBER 1989

The following information is a summary breakdown of recent past (highest and average) prices reportedly paid by primary wood processors for logs to be used in the manufacture of specialty wood products. These prices are not necessarily a reflection of current market prices. Fair market prices may vary a great deal based on log quality, contract size and terms, distance to market, green vs. dry logs, and a number of other factors. All information reported is recent average price per piece (log) delivered to the mill site, unless otherwise noted. Please contact buyers before cutting logs to obtain their detailed specifications (log length and diameter). Species other than those listed may be in demand.

Prices provided for this report by individual firms firms are treated as confidential disclosure of the the firm's operations. Any requests for mill-specific data which have been provided for this report will be denied.

RAILS (Lodgepole pine only)

Prices are recorded as the highest reported prices over the average reported price

D.I.B.* small end (in.)	Length (feet)						
	<10	10	12	14	16	18	20
	.60	.65	.78	1.00	1.25		
	.51	.58	.70	1.00	1.22		
	.80	1.08	1.25	1.40	1.60	1.80	2.00
	.57	.80	.99	1.30	1.46	1.80	1.85
	.80	1.00	1.20	1.40	1.60	1.80	1.85
	.60	.82	1.02	1.40	1.41	1.80	1.85
	.70	1.05	1.30		1.75		2.00
	.61	.87	1.04		1.54		2.00
	.80	1.25	1.55	2.13	2.00		2.00
	.77	1.16	1.25	2.13	1.95		2.00

*Diameter inside bark.
Demand next 120 days: good, fair, poor

POLES (Lodgepole pine and western larch only)
Prices are recorded as the highest reported price over the average reported price.

Top D.I.B.* (inches)	Length (feet)						
	10'	20'	25'	30'	35'	40'	>40'
	.80	2.00			4.50		
	.72	1.76			4.50		
	2.25	5.00	7.00	11.00	20.00	30.00	
	1.68	3.48	6.00	11.00	20.00	30.00	
	2.60	5.75	8.00	12.00	26.00	35.00	45.00
	2.37	5.19	6.88	12.00	24.50	32.50	43.50
	2.75	6.50	9.25	13.00	29.00	40.00	47.00
	2.75	5.57	7.27	10.58	28.00	39.00	46.00
		6.50	9.25	13.00	31.00	44.00	51.00
		5.57	9.13	13.00	29.00	42.00	48.00

*Diameter inside bark.
Demand next 120 days: good, fair, poor

POSTS (Lodgepole pine only)
Prices are recorded as highest reported price over the average reported price.

D.I.B.* small end (in.)	Length (feet)		
	6.5	7.0	8.0
	.40		.55
	.40		.55
	.65	.70	.62
	.53	.70	.62
	.65	.70	.80
	.55	.70	.62
	.65	.75	.80
	.60	.73	.78
	.65	.75	1.30
	.60	.73	.94
	.70	.90	1.30
	.61	.77	1.04
	.75	.90	1.60
	.64	.80	1.14
	.75	1.20	2.25
	.65	1.20	1.51

*Diameter inside bark.
Demand next 120 days: good, fair poor

HOUSE LOGS
Prices are recorded as the highest reported price followed by the average reported price.

	Top Diameter (in.)	Length (feet)			
		<16'	16-25'	33-35'	>35
		15.36		22.80	35.00
		15.36		22.80	32.30
Lodgepole		15.52	21.00	43.00	45.00
		14.26	21.00	43.00	45.00
Spruce					
			26.67	75.82	117.25
			26.67	75.82	117.25
				81.94	137.20
				81.94	137.20

Demand next 120 days: good, fair, poor

MEETINGS

On Thursday nights beginning January 11 through March 15, 1990 the Noxon Public Schools and Sanders Co. Extension Service will be sponsoring an adult education course on Land Management and Animal Husbandry. Topics will be presented on "Wood Lot Management," "Weed Identification and Control," "Integrated Pest Management," "Alternative Crops and Marketing Systems," "Riparian Area Management," "Small Farming Practices," "Live Stock Nutrition," and "Herd Health Programs." A pre-registration fee of $4.00 may be paid at the Noxon High School. For further information contact the Sanders Co. Extension Office at 827-4394.

Forest Industries Clinic and Machinery Show, February 28-March 2, 1990. Largest international show in North America devoted exclusively to the primary processing industry. For more information, contact 500 Howard Street, San Francisco, California 94105; telephone number (415) 995-2472.

Forest Taxation Workshop: A one-day workshop on federal taxation related to forest lands will be held in Missoula on February 13, 1990. Foresters working with non-industrial private forest landowners, county tax assessors, and State revenue officials will benefit from this workshop. The meeting is sponsored by the Northern Region, USDA-Forest Service and the Montana Department of State Lands. For more information contact Glenn Roloff, Cooperative Forest Management Specialist, at (406) 329-3521 or Mark Lennon, Supervisor, Forestry Assistance Section, Missoula, at (406) 542-4326.

Intermountain Roundwood Association: The annual Intermountain Roundwood Association meeting is scheduled for February 27, 1990 at the Holiday Inn Parkside in Missoula. A one day wood treaters recertification training program has been scheduled in conjunction with the meeting on February 26. To obtain reduced room rates reservations should be made prior to February 12. For more information contact Sue Falk at (406) 777-5434 or Terry Claver at (406) 566-2453.

Northeast Wood Products Expo 90: March 17-19, 1990; Hershey, PA, Convention Center. Unique opportunity for exhibitors to deal directly with a number of domestic and foreign customers and for buyers to find new sources, raw materials, components, and other products. For information contact Newpex 90 Expo Manager, Dame Associates, Inc., 51 Church Street, Boston, Massachusetts 02116. Phone: 1-800-843-3263.

SECOND SET OF LOGGING CARDS AVAILABLE

Five new logging training cards are now available from the Oregon State University, Forest Engineering Extension program. These add to the earlier set of ten training cards on logging training and safety. The second set of cards includes:

1. The idea of self supervision (risk-taking in logging).

2. Log truck driver safety.

3. Productivity tips for efficient skidding.

4. Productivity tips for efficient yarding.

5. Mechanized harvesting productivity (accompanies a videotape on this topic).

Prices depend on quantity ordered: 1 set-$7.00, 2 to 9 sets-$5.00/set, 10 or more--$4.00/set. Available from: Forestry Media Center, College of Forestry, Oregon State University, Corvallis, Oregon 97331-5702. Reprinted from Technical Newsletter Series, FPRS vol:3, No:4.

FOR SALE EQUIPMENT

Shake saw in excellent condition--Lincoln 15 HP motor 230/460, Serial #01052, manufactured by Washington Industrial Saw, Inc. $4,000.00; gummer in excellent condition; older head saw & Motor with extra teeth & belts; sorting bins; bundling racks; electric disconnects & dust shoots; approximately 16 band saw blades for the shake saw. $400.00 for all. Contact Tom Stephenson, (406) 961-3774--Call anytime after 6:00 P.M., or leave message on recorder days.

Bobcat 975 in good shape, includes bucket and log forks with quick bob-tack. $15,000 firm, Stevensville Post & Pole, (406) 777-5434.

1968 White Tractor with 5th wheel, engine problems, $3,000 or best offer; Allis Chalmers HD9 complete with winch & canopy, good for parts, $2,500.00. Contact William Johnson, 55 Dry Creek Road, Boulder, Montana 59632 or phone (406) 225-3570.

1980 Cat skidder, cable-equipped, in good condition. $45,000.00. Contact Marvel Logging, 1200 W. Kootenai, Rexford, Montana 59930., (406) 889-3426.

Produce 25% more lumber from every log with the Timber Harvester portable sawmill. Fully remote controlled and hydraulically operated. Heavy duty construction with chain log turner and loader. Fast payback! One- or two-man operation. For details call 1-800-343-2969 or (315) 539-5095.

Two Wood-Mizer Vacu Kilns, Model 1000 (like new). Contact: Fremont Gruss, 6300 Smithtown Road, Excellesor, Minnesota 55331, Phone: (612) 474-7195.

Used Cornell 4 saw multi-trimmer, in good condition. Includes four York 20" carbide tipped 80 tooth sawblades. Hydraulic variable speed-controlled feed. Can be run with diesel or one electric motor. Phone: (717) 658-7301, Beaver Springs, Pennsylvania 17812.

Sawdust, woodchip, hogged fuel burners. Sizes from 250,000 btu/hr up to 8 million btu/hr. Use for plant heat, Lumber dry kilns, system can be retro-fired to existing boilers. Residential wood burning furnaces also available. Contact Humble Energy Products, Box 704, Hwy 43 North, Rushford, Minnesota 55971. Phone: (507) 864-2525.

American straight line ripsaw; Crosby 8-saw drop saw trimmer; planer SA Woods 4 side opening; trimmer 2-saw Blanchard reconditioned; 2-saw Forest-All vertical edger with motor; 16'live conveyor; Morbark 636 debarker w/infeed and out feed w/sets kickers, 50 hp electric Complete HMC mill. Conveyors/plus, 29 Putney Road, Bow, New Hampshire 03304. Phone: (603) 774-6975.

PRODUCTS FOR SALE OR WANTED

For sale: 4/4, 5/4, 8/4, 12/4 Red Oak; 4/4 White Oak; 4/4 Cherry. We are also looking for fabricators of wood products, either rough, green or kiln dried. Particularly interested in plants that can cut to length, and surface hardwoods.

Northern White Cedar shakes/shingles, 18"long, 1/2" 5/8"thick. 4 bundles make one square with an 8" exposure. For more information phone or write Donald Hauner Box 438, Littlefork, MN 56653. Phone: (218) 278-4115, or (218) 278-4115.

ENVIRONMENTAL EFFECTS OF TREATED WOOD PRODUCTS

Treated Wood Products, Their Effect On The Environment--This article authored by Daniel A. Webb and Lee R. Gjovik appears on pages 254-264 of the 1988 Proceedings of the American Wood-Preservers' Association. Briefly summarizing the article, the authors make the following points:

1. EPA's pesticide regulations do not consider wood treated with creosote, pentachlorophenol or the waterborne assenicals to be a pesticide.

2. Wood that has been treated with the above chemicals does not present an unreasonable health risk to man, animals, or the environment.

3. EPA has concluded that the benefits of treated wood, and the preservatives that are used to treat the wood, outweigh any potential risks that may occur.

4. Preservative chemicals do not move and migrate from treated wood and cause significant environmental hazards, nor do the chemicals bio-accumulate to be of potential risk.

5. There should be no cause for concern by the general public when exposed to properly treated wood products when they are used as recommended.

A copy of this article may be obtained from Jackie Reindl at (608) 231-9327 or by DG, J.Reindl:S32A.

Source: The Utilization and Marketing Review, Vol. 2, No. 1, January 1990.

NEWS FROM STONE FOREST PRODUCTS DIVISION

Jim Wilson has been promoted to Regional Manager of Stone Container Corporation's Forest Products Division, replacing Marvin McMichael, who recently resigned. Bill Chandler has been promoted from Missoula District Forester to Northwest Area Manager and Todd Thompson, from Stone's Ontonagon, Michigan pulp mill, has filled Bill's position.

If you wish to advertise a forest product or a piece of wood-processing machinery in this bulletin, complete form below. No charge is made for this service. If you wish to rerun an item, a written request must be submitted before the next issue.

NAME OF PERSON OR FIRM:_____

MAILINGADDRESS:_____

ZIP CODE:_____ PHONE:_____

Type or print your advertisement in the space below, detach and return to:

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Forestry Division
Forest Products Bulletin
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Missoula, Montana 59801

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